

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Goodrich Corporation

PERMIT, ADDRESS, AND FACILITY DATA

Permit No. SP0000006

Application No. 201501120

<u>Mailing Address:</u> Street: 100 Wooster Heights Road City: Danbury ST: CT Zip: 06810	<u>Location Address:</u> Street: 100 Wooster Heights Road City: Danbury ST: CT
Contact Name: Steven Peterson Phone No.: 203-797-5000 Email: steven.peterson@utas.utc.com	DMR Contact: Same Phone No.: Same Email: Same

Permit information

Duration 5 Year X 10 Year 30 Year
Type New Reissuance Modification X
Categorization Point (X) Non-Point ()
NPDES () Pretreatment (X) Groundwater (UIC) () Groundwater (Other) ()

NPDES Major (MA)
NPDES Significant Minor or Pretreatment SIU (SI)
NPDES or Pretreatment Minor (MI)
Pretreatment Significant Industrial User (SIU) X
Pretreatment Categorical (CIU) X

Pollution Prevention Mandate Environmental Equity Issue

Standard Industrial Classification ("SIC") Code: 3827

Secretary of State Business ID: 0081840

Solvent Management Plan

Is the facility operating under an approved solvent management plan? Yes X No
Approved on: July 15, 2002

Compliance Issues

Compliance schedule: Yes No X
Pollution prevention Treatment requirement Water conservation

Permit No. SP0000006

Water quality requirement ____ Remediation ____ Other ____
Is the Permittee subject to a pending enforcement action? Yes ____ No X

Ownership Code

Private X Federal ____ State ____ Municipal (town only) ____ Other ____

DEEP Staff Engineer Stephen Edwards (Oluwatoyin Fakilede, 2011 reissuance)

Permit Fees

<u>Discharge Code</u>	<u>Discharge Category</u>	<u>DSN</u>	<u>Annual Fee</u>
519000c	Minor Tumbling and Cleaning	001-1	\$4,337.50
501020Y	Electrical and Electronic Components	002-1	\$4,330.00
5060000	Water Production Wastewater	002-1	\$600.00

Discharge Location

The discharges are to the City of Danbury's POTW via its collection system.

Nature of Business Generating Discharge

Goodrich Corporation designs, develops, and manufactures precision optics and electro-optical systems and sensors, for defense, aerospace, scientific and commercial applications.

Process and Treatment Description (by Discharge Serial Number ("DSN"))

DSN001-1: Comprises of up to 12,000 gallons per day of large optics polishing wastewater, small optics fabricating and optical fabrication ultrasonic cleaning wastewater and edge grinding ultrasonic cleaning wastewater. Wastewaters are treated for solids removal in settling tanks and batch pH adjustment prior to discharging to sanitary sewer.

DSN 002-1: Comprises of up to 4,900 gallons per day of treated optical cleaning wastewater, etching wastewater, electronic crystal wafers manufacturing wastewater, and laboratory wastewaters (formerly DSN 014-1). Wastewaters undergo batch neutralization prior to discharge to sanitary sewer.

Resources Used to draft permit

- X Federal Effluent Limitation Guideline: 40 CFR 469, Subpart B Electrical and Electric Components (DSN 002)
- ____ Performance Standards
- ____ Federal Development Document
- ____ Treatability Manual
- X Department File Information
- ____ Connecticut Water Quality Standards

- ☐ Anti-degradation Policy
- ☐ Coastal Management Consistency Review Form
- ☒ Other

Basis for Limitations, Standards or Conditions in 2011 Permit Reissuance

- ☒ Pretreatment Standards for Existing Sources (PSES)
DSN 002-1:- TTO (MIL)
- ☒ Case-by-Case Determination using Best Professional Judgment (See Other Comments)
DSN 001-1:- Aluminum (AML, MDL, MIL), lead (AML, MDL, MIL), pH (MIL), oil petroleum, total recoverable (MDL, MIL), total suspended solids (MDL, MIL) and zinc (AML, MDL, MIL)

DSN 002-1:- Ammonia (AML, MDL, MIL), arsenic (AML, MDL, MIL), pH (MIL) and total suspended solids (AML, MDL, MIL)
- ☒ Section 22a-430-4(s) of the Regulations of Connecticut State Agencies ("RCSA")
DSN 002-1:- Chromium (AML, MDL, MIL), fluoride (AML, MDL, MIL), hexavalent chromium (AML, MDL, MIL) and zinc (AML, MDL, MIL)

Note: Corrected (2015) to show aluminum in DSN 001-1 and arsenic in DSN 002-1

AML: Average Monthly Limit, MDL: Maximum Daily Limit, MIL: Maximum Instantaneous Limit

COMMENTS FROM 2011 PERMIT REISSUANCE DATA TRACKING AND TECHNICAL FACT SHEET

Goodrich Corporation recorded several pH exceedances for DSN 001-1, but they believe that the exceedances were associated with improper pH probe location or cleaning, rather than with actual pH of the wastewater. The pH probe is now manually cleaned twice a month, relocated to allow it to constantly be inside the wastewater, and replaced annually. A portable pH meter was also purchased by the Permittee to verify pH readings should an exceedance occur. pH has been within the permit limits since April 2010 to November 2010.

Included in the DSN 002-1 discharge is reliability laboratory wastewater, which was formerly DSN 014-1 in the previous permit. This wastewater, which is associated with product quality assurance process, is composed of a maximum of 50 gpd, and was formerly discharged without treatment, or hauled away for off-site disposal if the pH is outside of the permit range. This wastewater is compatible with the DSN 002-1 treatment system, and has been re-routed into DSN 002-1.

There are two deionized water systems on site. The backwash from deionized water system in Area 144 discharges into the treatment system of DSN 002-1 while the backwash from deionized water system in Area 90 is permitted under a general permit and is discharged downstream of the sampling location of DSN 002-1.

Oil petroleum, total recoverable will be the permit parameter used in this permit, replacing total oil and grease used in the previous permit.

A limit was included for total toxic organics in Table B, in accordance with the federal effluent limitation guidelines for electrical and electronics component categorical discharge (40 CFR 469, Subpart B).

The Permittee no longer generates circuit board flux wastewater because circuit boards are no longer manufactured on site.

Therefore, limits and monitoring requirements for copper, lead, nickel and tin that were associated with the discharge of circuit board wastewater are not included in this permit. Also, a review of the Permittee's discharge monitoring reports (DMRs) showed very low concentrations of these metals in the wastewater. Permit language stating that the Permittee is not authorized to discharge circuit board flux wastewater was included as remark a) in Table B.

The limits for lead, oil petroleum, total recoverable, total suspended solids and zinc in DSN 001-1 and total suspended solids in DSN 002-1 were developed based on a Case by Case Determination using the criteria of Best Professional Judgment. These limits are consistent with the previous permit in accordance with the anti-backsliding rule. Limits were included for arsenic based on historical effluent data. A review of the facility's DMRs showed that the Permittee should not have any problems meeting these limits.

2015 PERMIT MODIFICATION

Basis for Limitations, Standards or Conditions in 2015 Permit Modification

Outfall	Parameter	Basis for Limits		
		22a-430(s)	Case by Case	40 CFR 469
001-1	aluminum		AML, MDL, MIL	
	chromium, total		AML, MDL, MIL	
	copper		AML, MDL, MIL	
	fluoride		AML, MDL, MIL	
	lead		AML, MDL, MIL	
	pH		MIL	
	oil petroleum, total recoverable		AML, MDL, MIL	
	silver		AML, MDL, MIL	
	TSS		AML, MDL, MIL	
	zinc		AML, MDL, MIL	
002-1	ammonia		AML, MDL, MIL	
	arsenic		AML, MDL, MIL	
	chromium, hexavalent	AML, MDL, MIL		
	chromium, total	AML, MDL, MIL		
	fluoride	AML, MDL, MIL		
	pH		MIL	
	TSS		AML, MDL, MIL	
	TTO			MIL
	zinc	AML, MDL, MIL		

AML: Average Monthly Limit, MDL: Maximum Daily Limit, MIL: Maximum Instantaneous Limit

COMMENTS ON 2015 PERMIT MODIFICATION

On February 13, 2015, Goodrich Corporation submitted application No. 201501120 requesting to modify DSN 001-1 of discharge permit SP0000006 to include wastewater generated from an additional cleaning line and a proposed new process at their facility. DSN 001-1 is comprised of wastewater from cleaning, grinding and polishing glass optics. Once polished, a metal coating is vacuum plated onto the glass optic. There is no wastewater discharged from the vacuum plating operation. The proposed process is an acid stripping operation to remove metal from the vacuum-plated parts that fail quality testing. After the metal coating is stripped, the glass optic will be returned for cleaning and polishing before it is again vacuum plated. All wastewater associated with the stripping operation will be shipped off site for disposal.

Goodrich Corporation believes that the acid stripping operation is equivalent to an etching/milling process, one of the six primary metal finishing operations under 40 CFR 433.10. Therefore, Goodrich Corporation feels that rinse waters from the glass cleaning, polishing and grinding processes would be considered metal finishing wastewaters because the cleaning, polishing and grinding metal finishing subcategories are three of the 40 secondary metal finishing operations listed in 40 CFR 433.10.

Although acid stripping does not exactly match the EPA definition of etching/milling, Department staff agrees that in this case, the stripping operation could be equated to etching. However, cleaning, grinding and polishing glass, even glass processed through the stripping operation, is not metal finishing. Therefore, since there is no discharge from either the vacuum plating or etching processes, DSN 001 would not be regulated under EPA's metal finishing categorical standards in 40 CFR 433. This was confirmed with Justin Pimpare (specialist from EPA New England for pretreatment issues) in a phone conversation on August 19, 2015.

This permit modification adds monthly monitoring requirements and limits for total chromium, copper and silver, the metals vacuumed coated onto the glass optics, for DSN 001-1. Limits for these parameters were established on a case-by-case basis using best professional judgment. Once monitoring information of the resulting discharge is available and the actual concentrations of these metals in DSN 001-1 is known, the monitoring frequency may be reduced.

Since fluoride is commonly used in the processes that contribute wastewater to DSN 001-1, monthly monitoring requirements for fluoride with applicable limits from section 22a-430-4(s)(2) of the RCSA were added with this modification. It appears that the limits and monitoring requirements for fluoride were inadvertently omitted when the permit was reissued in 2011.

For DSN 001-1, the 2011 permit identifies the monitoring location as "Effluent flow measurement flume in garage bay". This was modified to "Auto sampler on the discharge line from the two 800 gallon batch treatment tanks" to clarify and more accurately describe the monitoring location.

For DSN 002-1, the 2011 permit identifies the monitoring location as "Neutralization system effluent". This was modified to "Auto sampler on the discharge line from the two 800 gallon batch treatment tanks" to clarify and more accurately describe the monitoring location.

The definition from 40 CFR 469.22 for the term "total toxic organics" ("TTOs") was added to Section 2(B) of the permit.

The instructions contained in section 5(G) of the permit of how to certify to compliance with an approved solvent management plan in lieu of monitoring for TTOs were clarified and changed to match the language contained in 40 CFR 469.23.

Section 5(H) was added to make clear that the Permittee must followed its approved solvent manage plan should they chose to submit a certification in lieu of monitoring for TTOs.

Remark a) in Table B, "The Permittee is not authorized to discharge circuit board flux wastewaters under this permit.", was moved to section 4(D) of the permit.

DRAFT